#### Teroshkin Oleksander Senior Software Engineer 8+ YEARS OF EXPERIENCE

Specializing in designing practical, user-focused solutions that address real-world challenges, with clear communication across all levels, from interns to C-suite executives. Complex problems are approached step by step, fostering a collaborative environment where team well-being is prioritized, recognizing that a strong and cohesive team drives meaningful results.

Success is achieved through steady progress, with each milestone building towards the larger goal

#### **EXPERIENCE -**

## HEAD OF RESEARCH AND DEVELOPMENT (R&D) Aug, 2023 - Nov, 2024

NDA

- · Technical Leadership & Architecture
  - Partnered with C-suite and team leads to align technical solutions with business strategy
  - Designed and implemented system architecture, data structures, and data processing systems
  - Created comprehensive testing plans and documentation
- Engineering
  - Built search/recommendation system with 11-50ms response time for 20M+ records
  - · Implemented fuzzy matching, spell correction, named entity recognition and recommendation algorithms
  - · Designed a pipeline for document analysis, vector indexing, and semantic search with classification and summarisation
  - Analysed 200M+ user requests to optimise system boundaries and performance
  - Developed a system for analytics, reporting, and code quality assessment using LLMs
- · Quality Assurance
  - Achieved 70% test coverage across unit, integration, and performance testing
  - Developed testing frameworks and validation processes
  - · Established metrics and monitoring for system reliability

# SENIOR SOFTWARE ENGINEER May, 2021 - June, 2023

NOKIA

- System Architecture & Design
  - Led architecture design for cellular networks serving 100M+ users, focusing on 3GPP, 4G/LTE, 5G, and O-RAN
  - Designed scalable systems supporting 100,000+ users per node with integrated monitoring
  - Developed scalable micro-frontend architecture with integrated search and validation
- Technical Leadership
  - · Collaborated with C-suite on strategic initiatives across hardware, software, testing, and hiring
  - Directed system design efforts with major cellular operators, cooperation with 40+ engineers
  - Implemented RBAC-based hierarchical control system for multi-product security management

## SENIOR SOFTWARE ENGINEER Jun, 2020 - Apr, 2021

FGP

- Technical Leadership
  - Led 10-person team of Unreal Engine, backend and frontend, managing sprints and development processes
  - · Redesigned mobile and web applications with focus on UX improvements
  - Developed real-time streaming solution for Unreal Engine integration
- System Architecture
  - Implemented OAuth/2FA authentication with RESTful API integration using SMS
  - Designed cross-platform WebRTC interface supporting multiple browsers/OS
  - Built client-UE command and data exchange functionality
- Quality Assurance
  - · Conducted cross-environment testing using remote machines, VirtualBox, and physical devices

Python • Golang • TypeScript • SQL • Dart • React • Flutter • AWS • Docker • Postgres • RabbitMQ • CI • CD • Linux • GIT ELK • Math • NLP • ML • LLM • RAG • TensorFlow • WebSockets • WebRTC • RPC • GraphQL • Agile • SCRUM • Figma

#### **EDUCATION**

2016 - 2020, BSc with Honours, KNU Information computing technology

2020 - 2022, MSc, KNU

Information computing technology

## CERTIFICATES

## **Cisco Networking Academy**

- 2020, Cisco, Introduction to Networks
- 2020, Cisco, Programming Essentials in Python
- 2020, Cisco, Routing and Switching Essentials
- 2020, Cisco, Introduction to Cybersecurity

# LANGUAGES

- English Fluent
- Russian Fluent

• Ukrainian - Native











## TEAM LEADER June, 2018 - June, 2020

## **ECHO STUDIO**

- Led cross-functional teams across 8 countries (USA, EU, Asia)
- · Managed frontend/backend resource allocation and development workflows
- · Optimized documentation processes for improved team collaboration
- Reduced search latency by 90% (400ms to 30-50ms) while handling 1000 RPS using Solr/MySQL
- Implemented real-time push notification system supporting 31,000+ concurrent users

# JUNIOR FULL STACK DEVELOPER Jan, 2017 - June, 2018

Private practice / University

- · Developed a tool for visualizing server performance logs
- · Developed RBAC-based cloud file management system with sharing capabilities
- · Completed AI Institute internship focusing on NLP
- Implemented NLP techniques: tokenization, vectorization, lemmatization
- · Applied logistic regression and Random Forest algorithms
- · Metrics: Log analysis tool performance, file system usage/scale, ML model accuracy

## NON-COMMERCIAL ——

## CO-FOUNDER June, 2022 - PRESENT

Go Music

- · 3-5 seconds average music recognition time
- Updating the system in 15 minutes using a robust CI/CD pipeline encompassing backend services, iOS app deployment to TestFlight, Android app packaging to APK, web to S3, and backend to EC2 deployment using GitHub Actions
- · Developed efficient multithreaded audio decoding for streaming services on Android/iOS
- · Integrated multiple APIs to enhance app functionality

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## RESEARCHER June, 2024 - Nov, 2024

# **Computer Vision Research**

- Tested neural networks for background removal in videos featuring people.
- · Implemented chroma keying for several chroma channels using case-dependent algorithms.
- · Developed automatic template detection and animation: highlight or zoom.
- Implemented image replacement systems based on rules, such as replacing phone screens with user-submitted videos.
- · Supervised a university intern, providing guidance and practical experience in the field.
- · Filming and preparing materials, together with cameramen and actors.

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